

REMARKS

In the pending Office Action, the Examiner rejected Claims 1-3, 9, 11-20, 22 and 24-27 and objected to Claims 4-8, 10, 21 and 23 as being dependent upon a rejected base claim but would be allowable if rewritten to include all the limitations of the base claim and any intervening claim. By this Amendment and Response, Applicant has amended Claims 1, 15-18, 19 and 27. Claims 1-27 are pending in this application.

The Examiner objected to the Abstract on the basis that the language "This invention generally relates to" was deemed to be unacceptable under MPEP 608.01(b). By this Amendment and Response, Applicant has amended the Abstract to meet this objection.

The Examiner rejected Claims 15-18 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. Specifically, the Examiner stated that Claims 15-18 recite that the first arm or second arm forms an angle within given ranges, but does specify a frame of reference. By this Amendment and Response, Applicant has amended Claims 15-18, support for which may be found in the Specification at page 11, ll. 1-10.

The Examiner rejected Claims 1-3, 9, 11-18 and 27 under 35 U.S.C. 102(b) as being anticipated by Kneip (U.S. Patent No. 5,915,713), Claims 19 and 25-27 under 35 U.S.C. 102(b) as being anticipated by Beck (U.S. Patent No. 2,809,851) and Claims 19, 20, 22 and 24-27 under 35 U.S.C. 102(b) as being anticipated by Betchart (U.S. Patent No. 3,360,280). As set forth in more detail below, however, none of the cited references disclose or suggest a towing hitch assembly comprising a support connector adapted to be removably and movably connected to a towing hitch, a support structure adapted to be connected to a trailer, and at least two arms each pivotally connected to the support connector and the support structure.

For example, Kneip generally discloses a semitrailer support device to adjust the height and longitudinal position of a fifth wheel towing hitch, relative to the vehicle. Kneip is not directed to a structure between the towing vehicle hitch and the trailer. Referring to Figure 3, the angled arms

18, 19 are pivotally connected to each other at a top end 20 and to sliders 16, 17, respectively, at the other end. To adjust the height of the hitch 14, one or both of the sliders 16, 17 are moved in the longitudinal direction. That is, to raise the height of hitch 14, the distance between sliders 16, 17 is reduced, while to lower the height of hitch 14, the distance between sliders 16, 17 is increased. To adjust the longitudinal position of hitch 14, while maintaining the same height, both sliders 16, 17 are moved the same amount in the desired direction. See, e.g., Kneip, Col. 11. 26-51, Fig. 3. Once the desired height and longitudinal position of the hitch 14 is achieved, the sliders 16, 17 are locked into place, thereby securing the hitch 14 in a fixed position during operation. Kneip, Col. 3, l. 65 - Col. 4, l. 18.

Kneip discloses a particular structure, located between the vehicle frame and the hitch, to adjust the height and longitudinal position of a conventional fifth wheel hitch, relative to the vehicle. The Kneip hitch 14 itself is directly connected to arms 18, 19 and, once adjusted, is fixed in position relative to the towing vehicle and connects to a trailer in a fixed manner. Contrary to the Examiner's conclusion, hitch 14 of Kneip does not show a support connector adapted to be removably and movably connected to a towing hitch. There simply is no structure in Kneip directed to the support connector, or to the support structure, as set forth in Applicant's claims.

Beck generally discloses a fifth wheel coupler mounting comprising arms 8, 9 that are each pivotally connected directly to hitch 7 at one end and that are each pivotally connected directly to brackets 17, which are fixed to the frame. See, Beck, Col. 2, ll. 3-67, Figs. 3, 5. The arms 8, 9 of Beck are shown with their upper ends (connected to the hitch 7) further apart horizontally than their lower ends (connected to the brackets 17/truck frame). As with Kneip, however, Beck discloses a particular structure, located between the vehicle frame and a conventional fifth wheel hitch. Beck does not show a support connector adapted to be removably and movably connected to a towing hitch, or to the support structure, as set forth in Applicant's claims.

Finally, Betchart generally discloses another device, similar to Kneip, to adjust the height and longitudinal position of a fifth wheel towing hitch, as a means to more effectively couple and release a trailer to a drom (a smaller storage compartment of the truck itself). See, Betchart, Col. 1. ll. 21-45,

59-63. Referring to Figure 5, the angled arms 69, 76 are pivotally connected to hitch/plate 66 at an upper end 74, 78, respectively, and pivotally connected to shafts 52, 59, respectively, at a lower end. Betchart, Col. 4, ll. 6-26. In this device, the arms 69, 76 are angled with the top ends closer to each other horizontally than the lower ends. To adjust the height of the hitch/plate 66, the shafts 52, 59 are moved in the longitudinal direction on rails 33, 34. Betchrat, Col. 3, ll. 58-64. Like Kneip, once the desired height and longitudinal position of the hitch/plate 66 is achieved, the arms are locked into position to prevent movement during operation of the truck and trailer.

Like Kneip, Betchart discloses a particular structure, located between the vehicle frame and the hitch, to adjust the height and longitudinal position of a conventional fifth wheel hitch, relative to the vehicle. The Betchart hitch/plate 66 is directly connected to arms 69, 76 and, once adjusted is fixed in position relative to the towing vehicle and connects to a trailer in a conventional manner. Hitch/plate 66 does not show a support connector adapted to be removably and movably connected to a towing hitch. There simply is no structure in Betchart directed to the support connector, or to the support structure, as set forth in Applicant's claims.

Among other things, Applicant's independent Claims 1 and 19 disclose an assembly that includes two parts that are connected to each other by at least two pivotally connected arms: one part (a support connector) that is removably and movably connected to the towing hitch; and another part (a support structure) that is connected to the trailer. That is, Applicant's assembly is located between the towing hitch and the trailer, and Applicant's support connector is able to move relative to the towing hitch during operation. Nothing in the cited art discloses or suggests such an assembly.

The ability of Applicant's support connector to move relative to the towing vehicle hitch, while also being pivotally connected to arms that are in turn pivotally connected to a support structure, distinguishes the cited art, both structurally and functionally. As described in the Specification, as the towing vehicle accelerates, the support connector rotates about the hitch due to the acceleration forces and due to the interaction of the support connector, the support structure and the arms pivotally connected to them. As the acceleration forces increase, the pivoting action of the arms causes the support connector to further rotate about and put additional pressure onto the hitch,

Application No. 10/677,188
Amendment dated July 29, 2005
Reply to Office Action of February 1, 2005

which provides additional resistance to, and dampening of, such forces. See, Specification, p.12, l.10 - p.13, l.12, p.15, ll. 3-12, Figs. 5, 6A-C. As the towing vehicle is braking, the assembly generally operates in the same manner, but in the opposite direction. See, Specification, p. 15, l.13 - p.16, l.6, Figs. 7, 8A-C. Similarly, independent Claim 27 recites a connector that is releasably and movably attachable to a towing hitch and arms pivotally connected thereto at angles other than vertical and other than parallel to each other.

In contrast, the cited art is directed to mechanisms to adjust the height and longitudinal position of a hitch relative to the towing vehicle (Kneip and Betchart) or to a swing arms fixed directly to the towing vehicle frame and to the hitch (Beck). The cited art does not disclose or suggest Applicant's invention.

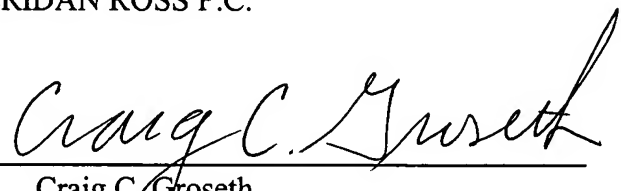
CONCLUSION

Based upon the foregoing, Applicant believes that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

SHERIDAN ROSS P.C.

By: _____


Craig C. Groseth
Registration No.31,713
1560 Broadway, Suite 1200
Denver, Colorado 80202-5141
(303) 863-9700

Date: July 29, 2005